Utah Diabetes Practice Recommendations

Diabetes in Pregnancy

Section 2 in a series of topics included in the Utah Diabetes Practice Recommendations

Updated - October, 2006

Diabetes Prevention & Control Program

UTAH DEPARTMENT OF HEALTH

www.health.utah.gov/diabetes

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Diabetes in Pregnancy

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Endorsements

The following professional associations and groups have reviewed the Diabetes In Pregnancy section of the Utah Diabetes Practice Recommendations that apply to their respective clinical areas of interest. They have indorsed these Recommendations to the extent they apply to their clinical areas, and found them to be consistent with applicable standards of care for women with diabetes in pregnancy. In extending their endorsement, it is recognized that these Recommendations, while outlining a general course of action for the majority of patients, do not substitute for informed clinical judgment on the exact course of treatment for individual patients.

American College of Physicians, Utah Chapter

American College of Obstetics and Gynecology, Utah Chapter

American College of Nurse Midwives, Region 5, Chapter 5

Association of Diabetes Educators in Utah

University of Utah Department of Obstetrics and Gynecology

Utah Academy of Family Practice

Utah Dietetic Association

Utah Nurse Practioners

Utah Ophthalmology Society

Utah Pharmacists Association

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GESTATIONAL DIABETES

Introduction

Gestational diabetes (GDM) is one of the more common challenges that can complicate obstetrical care. It is anticipated that the rate of GDM will continue to rise in proportion to the rate of type 2 diabetes within the population since they share common risk factors. In Utah, the rate of GDM has risen steadily over the past decade and currently affects 2.3% of all pregnancies (Utah Department of Health Report). Women with GDM are more likely to develop hypertensive disorders during pregnancy and have a several-fold higher risk of developing type 2 diabetes later in life. Offspring of women with GDM are more likely to be macrosomic, have obstetrical complications, develop hyperbilirubinemia, and have increased risk for type 2 diabetes later in life. Appropriate management of GDM may reduce the obstetrical risks for both the mother and baby.

Screening for Gestational Diabetes

Universal screening during pregnancy is controversial, and some organizations have recommended that only high-risk women with traditional risk factors for type 2 diabetes be screened. However, the vast majority of obstetrical groups employ universal screening, and if risk-stratification screening is employed, only 3% of women with GDM will remain undiagnosed yet only 10% of pregnant women will be exempted from screening. Given the increasing prevalence of both diabetes and GDM within the Utah population, the Diabetes In Pregnancy Committee recommends that all pregnant women be screened for GDM unless it is clearly not warranted based upon the practitioner's clinical judgment.

Low-risk women must meet all of the following criteria:

1. Age <25 years
2. Not a member of a high-risk ethnic population
3. Pre-conception BMI <25 kg/m^2
4. No prior history of abnormal glucose tolerance
5. No prior history of obstetrical complications associated with GDM
6. No family history of diabetes in a first degree relative

Screening Test

Between 24 and 28 weeks of gestation, women should receive a 50 gram 1 hour oral glucose challenge using a glucose solution (not jelly beans or other forms of glucose). This test may be performed without regard to prandial state. Due to the inherent imprecision of capillary glucose testing, glucose should be measured in the laboratory using venous blood. Using a threshold of 140 mg/dL for further diagnostic testing has a sensitivity of about 80%, while using a threshold of >130 mg/dL increases the sensitivity to nearly 100%. (See algorithm on page 2-5)

Diagnostic Criteria for Gestational Diabetes

If the screening test is abnormal (i.e. ≥ 140 mg/dL), a three-hour, 100 gram glucose tolerance test should be performed. This test should be administered in the morning after an 8-14 hour fast. The patient should not smoke before or during the test and should remain seated for the duration of the test. Prior to testing, the patient should be encouraged to follow an unrestricted carbohydrate diet (>150 grams of carbohydrate per day for 3 days) in order to avoid a false positive test.

Diagnostic Criteria for GDM*

Fasting	95 mg/dL
1 hour	180 mg/dL
2 hour	155 mg/dL
3 hour	140 mg/dL

*Two values exceeding any of the four timed plasma glucose reference values are diagnostic for GDM

The diagnostic criteria for GDM are shown in the adjacent table. The American Diabetes Association (ADA) and the American College of Obstetricians (ACOG) and Gynecologists have stipulated that a positive diagnostic test requires two or more thresholds to be exceeded. However, both organizations agree that patients with a single abnormal value during the 3-hour test have an increased risk for a macrosomic infant and if retested on a different day, up to 30% of these women would exceed at least two of the four thresholds. In the April 2005 publication of these practice recommendations for Diabetes in Pregnancy,

the Committee initially recommended more stringent diagnostic criteria for GDM; however, following extensive consultations with providers in the community, the Committee has agreed to reverse its position and to endorse the national standards espoused by the ADA and ACOG.

Treatment of Gestational Diabetes

The management of GDM is summarized in the algorithms on the following pages. Several points concerning these algorithms must be emphasized:

- None of these medications is FDA approved (category A) for use in pregnancy
- The use of insulin glargine (Lantus®) and glyburide in pregnancy is clearly off label, and due to the lack of long-term information on safety, informed patient consent is recommended prior to initiating therapy with either agent, (see pages 2-11 and 2-12 for suggested patient consent forms)
- There are adequate data documenting the lack of transplacental transfer of glyburide (in contrast to other sulfonylureas). Other sulfonylureas are not recommended
- Glyburide should not be used prior to 11 weeks gestation,
- A 10-25% primary failure rate may be expected in patients using glyburide, particularly among those patients with pre-treatment high fasting plasma glucose rates (>110 mg/dL) and among obese patients with a body mass index (BMI) above 41 kg/m^2
- It is not recommended that Metformin (Glucophage®) be initiated during pregnancy given the lack of knowledge regarding its long term effects; however, some experts recommend that if metformin were used prior to pregnancy in a woman with polycystic ovary syndrome (PCOS), it may be continued during pregnancy in order to lessen the risk of developing GDM

Postpartum Evaluation

Approximately 15% of women with GDM will continue to experience glucose intolerance or exhibit overt diabetes in the non-pregnant state. The American Diabetes Association recommends screening with a fasting plasma glucose (FPG) 6-8 weeks or administration of a 75g 2-hour oral glucose tolerance test if additional evaluation is clinically warranted (see UDPR Section 1 for the diagnostic criteria in non-pregnant adults). Women who are diagnosed with GDM early in pregnancy, who are obese, and those who required insulin or glyburide therapy are more likely to experience continued glucose intolerance or diabetes. It is unlikely that patients who have remained normal during the first 6 weeks postpartum will have an abnormal GTT. However, even for patients who return to a normal glycemic state, evaluation at least every 3-years is recommended. If the patient continues to have glucose intolerance or impaired fasting glucose without diabetes, she should receive intensive medical nutrition therapy (MNT) with a registered dietitian and be placed on an individualized exercise program. All patients who have had GDM should be encouraged to exercise and lose weight if they are overweight to reduce their very high risk of developing type 2 diabetes, and should be followed up at least annually. Before the next pregnancy they should be re-evaluated and treated if necessary to decrease the risk of major fetal malformations.

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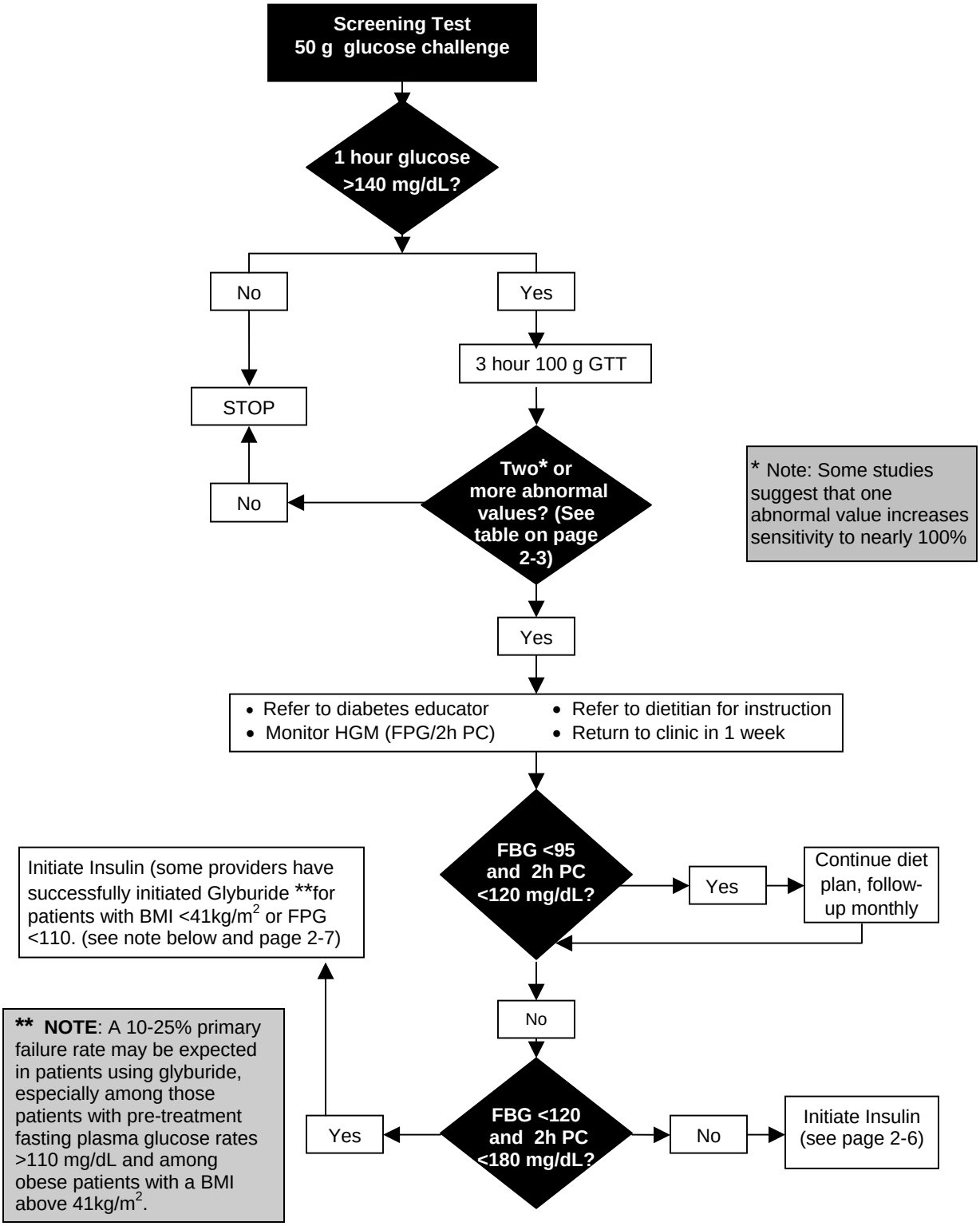
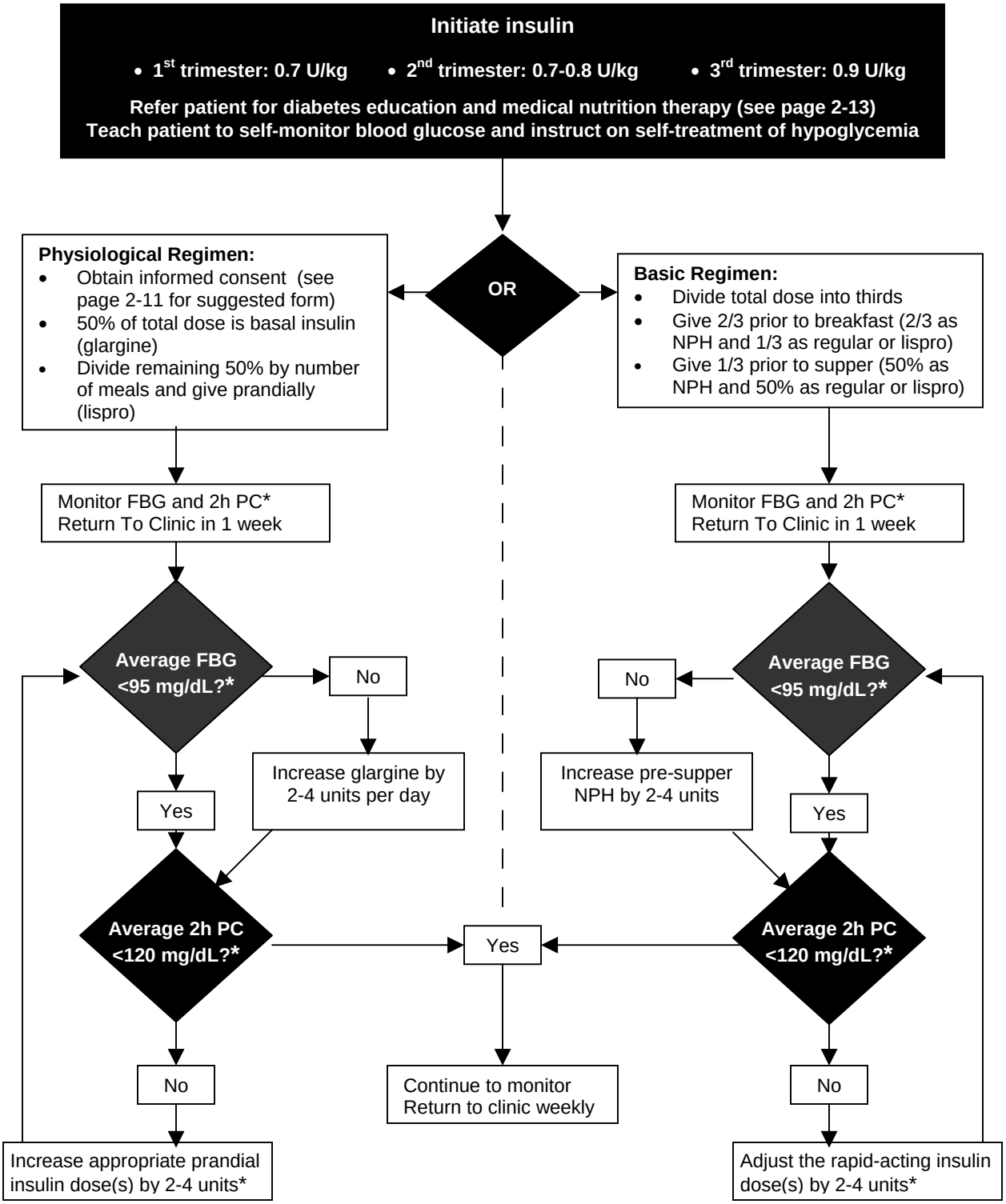
GESTATIONAL DIABETES SCREENING AND INITIAL MANAGEMENT PROTOCOL



INSULIN ALGORITHM FOR GESTATIONAL DIABETES

(Inclusion of glargine in this algorithm does not imply endorsement by the committee)

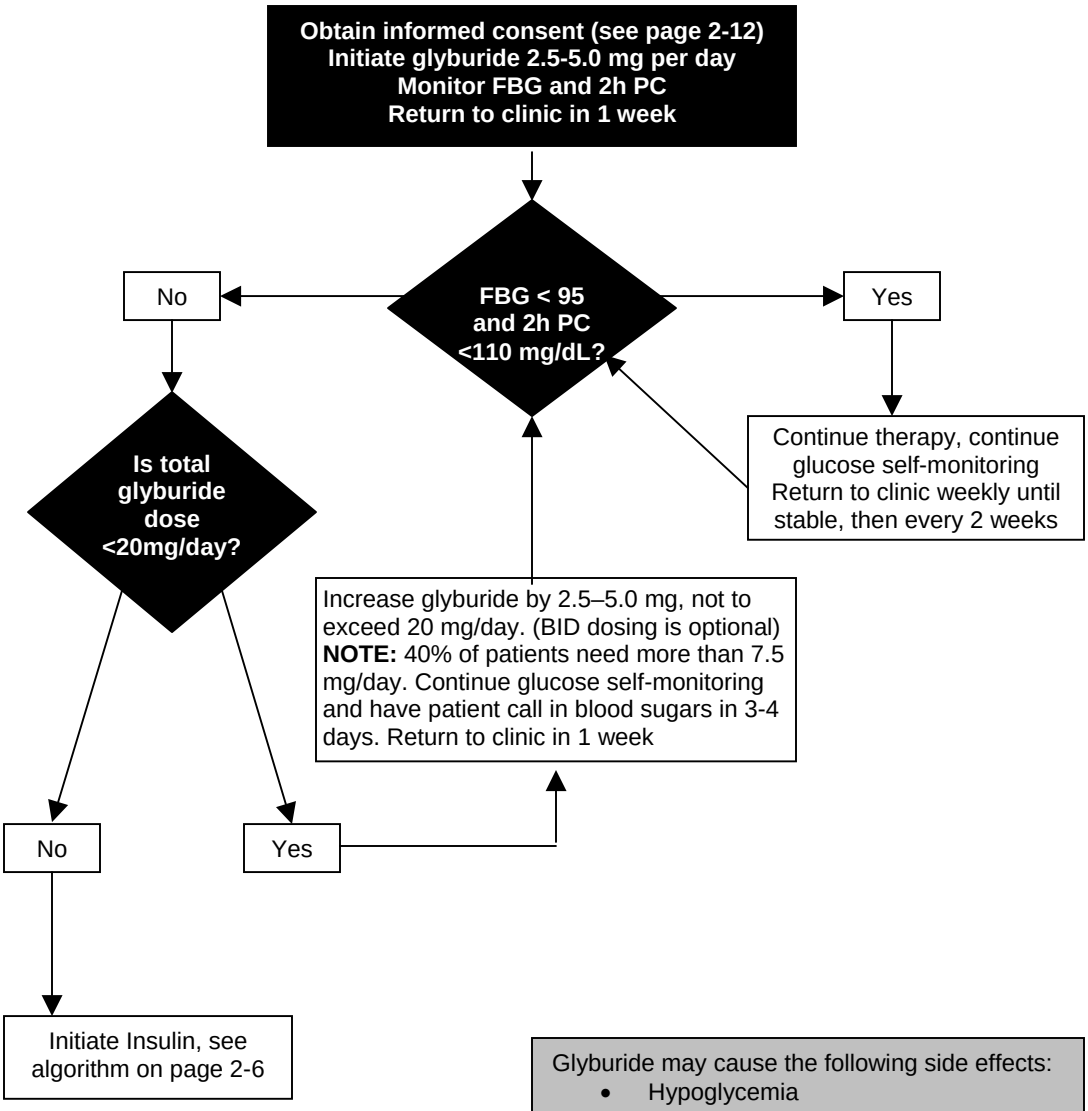


*With recurring hypoglycemia, reduce the dose of the corresponding insulin by 2-4 units

GLYBURIDE ALGORITHM FOR GESTATIONAL DIABETES

(Inclusion of this algorithm does not imply endorsement by the committee)

NOTE: Glyburide has been used by some practitioners for pre-selected patients with FPG <110 mg/dL and BMI <41kg/m^2. Current glyburide therapy data are from limited studies. Other sulfonylureas are not recommended.



Glyburide may cause the following side effects:

- Hypoglycemia
- Malaise
- Nausea
- Light headedness

PRE-EXISTING TYPE 1 AND TYPE 2 DIABETES

Preconception Counseling

Malformations fatal to the fetus and malformations involving multiple organ systems occur in 6-12% of infants born to mothers with diabetes, a rate six times higher than infants born to non-diabetic mothers. The first 5-8 weeks after the last menstrual period is the critical period of organogenesis during which poor glycemic control can have devastating effects. The A1C level is closely correlated with the risk of anomalies. Some studies have shown that an A1C of 8.5% or less is related to a malformation rate of 3.4%, while an A1C over 9.5% resulted in a rate of nearly 22%. Increased rates of spontaneous abortion have also been linked to poor preconception control. Women with an A1C >7% who are planning pregnancy, should be referred for diabetes education from a certified or recognized diabetes self-management education program (see pages 2-13, 14)

Both spontaneous abortion and major fetal anomalies can be reduced through good preconception and postconception control. Unfortunately, less than one third of women with diabetes receive preconception counseling. Thus, it becomes imperative that health care providers use every visit as an opportunity to counsel female patients about pregnancy risks.

Preconception counseling should focus on achieving optimal glucose control, as low as possible without undue hypoglycemia, but no more than 7%, and promoting a healthy lifestyle before conception. **ACE-inhibitors should be discontinued and patients on oral hypoglycemic agents should be switched to insulin**. Evaluation for vasculopathy is recommended. It is essential that family planning be emphasized, including the use of oral contraceptives, barrier methods, IUDs and sterilization as appropriate.

Retinopathy

Despite the fact that transition to tight glycemic control at any time, as well as during pregnancy, has been linked to transitory acceleration in retinopathy progression, the goal, nevertheless, is to maintain glucose levels as close to normal as possible. Retinopathy is also more likely to occur or progress in hypertensive patients. Active proliferative retinopathy can worsen in pregnancy and should ideally be controlled with laser therapy before conception. All patients should be referred for screening retinal exams at their first prenatal visit. Follow-up exams both during and after pregnancy are strongly encouraged if retinopathy is present. (See page 1-23 in *Section 1-Diabetes Management for Adults*)

Renal disease

Nephropathy during pregnancy is estimated at 5-10%. Pregnancies complicated by nephropathy are at increased risk for maternal and fetal morbidity and perinatal mortality. With nephropathy, the risk of maternal hypertensive complications, including preeclampsia, preterm birth and fetal growth restriction is heightened. Decreased creatinine clearance and proteinuria measures of renal dysfunction are the primary predictors of poor perinatal outcome. The following tests are recommended: 24-hr urine for protein; creatinine clearance; plus full renal function tests - serum electrolytes, BUN, creatinine. Women with incipient renal failure (i.e. serum creatinine >3 mg/dL or creatinine clearance <50 mL/min) should be counseled that pregnancy may induce a permanent deterioration of renal function in >40% of patients. In less severe cases of nephropathy, renal function may deteriorate transiently during pregnancy. Patients with a history of microalbuminiuria or those with diabetes of ten or more years duration, should be screened with a 24-hour urine collection for total protein and creatinine before pregnancy or at the initial prenatal visit.

Coronary Artery Disease

The hemodynamic changes associated with pregnancy increase myocardial stress. At especially high risk are those patients with long-standing disease who have developed hypertension and nephropathy. It has been suggested that epinephrine released in response to hypoglycemia may exacerbate the risk for myocardial injury. Coronary artery disease is a relative contraindication to pregnancy. Women with this condition should undergo preconception counseling and be informed of the risks before attempting pregnancy. Referral for a cardiology consult is recommended and baseline studies, including an electrocardiogram and echocardiography should be considered.

Other Maternal Complications

Peripheral and autonomic diabetic neuropathy have not been well studied in pregnancy. Nausea and vomiting commonly seen during pregnancy might be exacerbated in patients with gastroparesis. Peripheral neuropathy should be assessed at the preconception visit or early in gestation by a careful examination of the patient's extremities for sensory loss (see page 1-21 in *Section 1-Diabetes Management for Adults*). Instruction on foot care should be provided for all women with diabetes.

Diabetes Management During Pregnancy

During pregnancy, caloric requirements are increased. New guidelines advocate the use of carbohydrate counting as an option that may provide more flexibility during pregnancy.

- **Caloric intake should be managed for appropriate weight gain during pregnancy with special attention given to avoid excessive weight gain or any weight loss.**
- **For women of normal body weight, total caloric intake is usually 30 kcal/kg/day with an increase to 35 kcal/kg/day in women less than 90% of desirable body weight and 25 kcal/kg/day in those over 120% of desirable body weight.**
- **Medical nutrition therapy with a registered dietitian is strongly recommended**

Insulin is the mainstay of therapy. Metformin has not been well studied in pregnancy and it has been recommended by some experts that the drug be stopped once pregnancy has been diagnosed; however, some experts recommend that if metformin was used prior to pregnancy in a woman with polycystic ovary syndrome (PCOS), it may be continued during pregnancy. Metformin should not be *initiated* during pregnancy. (Refer to page 2-4)

For women already using insulin, dose requirements may actually decrease in the first trimester. However, insulin requirements generally increase as the pregnancy progresses, particularly between 28-32 weeks. In the third trimester any dose decrease due to hypoglycemia should be reported immediately to a provider; this may represent a decrease in placental function. Maintaining glucose levels as close to normal as possible is the goal of therapy. Urine or plasma ketones should be measured if glucose levels are repeatedly elevated (>200 mg/dL), and if positive, the results must be immediately reported to the provider. The values in the table below are targets for fasting and postprandial self-monitoring for both whole blood meters and plasma meters. The target for A1C is no higher than 6-7% or as low as possible without undue risk of hypoglycemia.

Achievement of glucose control depends on patient motivation, an understanding of the complex interactions between food, insulin, and exercise, as well as support from the health care team, including the obstetrician or perinatologist, registered dietitian, diabetes educator, and the patient's ability to recognize hypoglycemia.

Maintaining glucose levels as close to normal as possible is the goal of therapy, including the following targets:

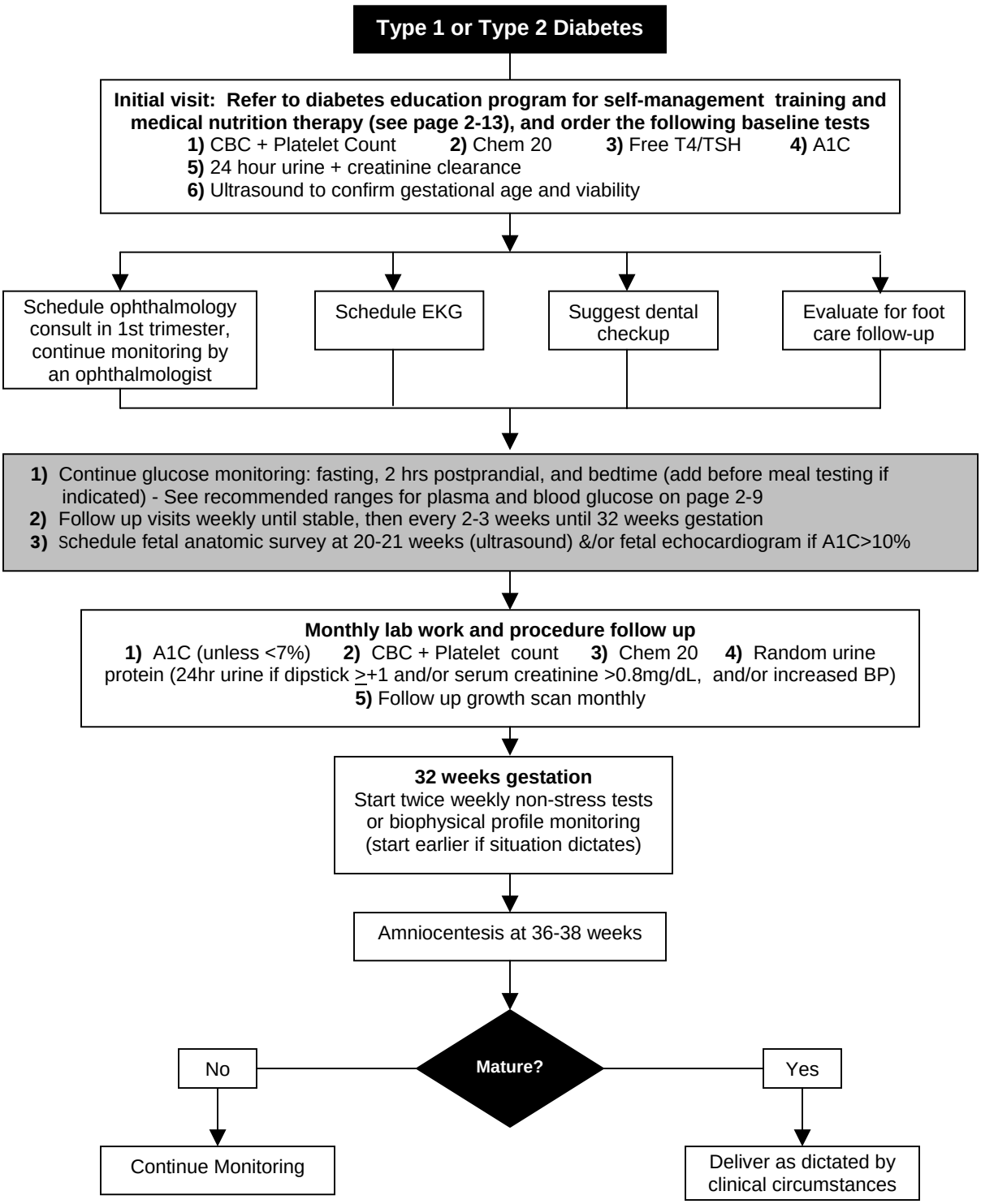
	Self-Monitored Whole Blood Glucose (mg/dL)	Self-Monitored Plasma Glucose (mg/dL)
Fasting/before meals	**≤ 95**	**≤105**
1 hour after meals	**≤140**	**≤155**
2 hours after meals	**≤120**	**≤130**

Rapid acting insulins are administered before meals to reduce postprandial glucose elevation associated with eating and allow utilization of consumed foods. Longer-acting insulins are basal insulins, used to restrain hepatic glucose production between meals and in the fasting state. Long-acting insulins, NPH (twice daily) or glargine (once daily) may be administered. The experience with glargine in pregnancy is limited and must be explained to the patient. It is strongly recommended that off-label use of diabetic medications be done with informed patient consent (see pages 2-11, 12).

Gabbe, SG; Graves, CR. Management of Diabetes Mellitus Complicating Pregnancy. Obstetrics & Gynecology 2003; 102:857-66
American Diabetes Association. Preconception Care of Women with Diabetes. Diabetes Care 2005; (Supp. 1): 28:S23-24

PREGNANCY WITH PRE-EXISTING TYPE 1 AND TYPE 2 DIABETES

MANAGEMENT AND MONITORING



LANTUS INFORMED CONSENT FORM

You are pregnant and are being treated for diabetes. It is very important to keep your blood sugar levels as normal as possible in order to prevent serious complications to both you and your unborn baby.

There are no FDA "approved" medicines to control blood glucose levels during pregnancy; however, the usual treatment is to use human insulin products. But over the past several years, newer man-made insulins have become available and are being safely used in women with diabetes who are pregnant.

Your doctor feels that you would benefit from using insulin glargine (**Lantus®**). At the present time, there are no reports that show Lantus® causes problems with unborn babies. Because there have been only limited reports on the use of Lantus® there still may be a risk of substantial or serious harm. It is known that high blood sugars are a major risk to your baby. Your doctor believes that using Lantus® will reduce this risk.

– –

My questions about the use of Lantus® have been answered satisfactorily, and I, (print name) _____, understand and accept the risks of possible substantial and serious harm and agree to use Lantus® during pregnancy.

Patient Signature: _____ Date: _____

Witness Signature: _____ Date: _____

FORMA DE CONSENTIMIENTO PARA EL LANTUS

Usted está embarazada y recibe tratamiento para la diabetes. Es muy importante de mantener los niveles de azúcar en la sangre lo más normal posible para prevenir complicaciones en usted y su bebé.

La FDA (Administración de drogas y alimentos de los Estados Unidos) no ha aprobado ningún medicamento para controlar el azúcar durante el embarazo, sin embargo el tratamiento usual consiste en inyectarse productos de insulina humana. Con el pasar de los años se han producido nuevas formas de insulina que son administradas sin problemas en mujeres embarazadas con diabetes.

Su médico opina que usted se beneficiaría usando glargine (**Lantus®**). Hasta el momento, no hay reportes que indican que Lantus® causa problemas con el bebé que usted esta esperando, pero debido a que se han realizado estudios limitados aun puede haber un riesgo sustancial o un daño serio. La alta cantidad de azúcar en la sangre constituye un gran riesgo para la salud de su bebé. Su médico cree que usando glargine (Lantus®) reduciría ese riesgo.

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Mis preguntas acerca del uso de (Lantus®) ha sido respondida satisfactoriamente, Yo, _____, entiendo y acepto el posible riesgo sustancial y el serio daño y estoy de acuerdo de usar Lantus® durante el embarazo.

Firma de la Paciente _____ Fecha: _____

Firma del Testigo_____Fecha:_____

GLYBURIDE INFORMED CONSENT FORM

You are pregnant and are being treated for diabetes. It is very important to keep your blood sugar levels as normal as possible in order to prevent serious complications to both you and your unborn baby.

There are no FDA "approved" medicines to control blood glucose levels during pregnancy; however, the usual treatment is to use human insulin products. But over the past several years, studies have shown that **glyburide** can be safely used in women with diabetes who are pregnant.

Your doctor feels that you would benefit from using glyburide. At the present time, there are no reports that show glyburide causes problems with unborn babies. Because there have been only limited studies there still may be a risk of substantial or serious harm. High blood sugars are a major risk to your baby. Your doctor believes that using glyburide will reduce this risk.

– –

My questions about the use of glyburide have been answered satisfactorily, and I, (print name) _____, understand and accept the risks of possible substantial and serious harm and agree to use glyburide during pregnancy.

Patient Signature: _____ Date: _____

Witness Signature: _____ Date: _____

FORMA DE CONSENTIMIENTO PARA EL GLYBURIDE

Usted está embarazada y recibe tratamiento para la diabetes. Es muy importante de mantener los niveles de azúcar en la sangre lo más normal posible para prevenir complicaciones en usted y su bebé.

La FDA (Administración de drogas y alimentos de los Estados Unidos) no ha aprobado ningún medicamento para controlar el azúcar durante el embarazo, sin embargo el tratamiento usual consiste en inyectarse productos de insulina humana. Con el pasar de los años estudios han demostrado que **glyburide** puede ser seguro cuando es usado en mujeres embarazadas con diabetes.

Su médico opina que usted se beneficiaría usando glyburide. Hasta el momento, no hay reportes que indican que glyburide causa problemas con el bebé que usted está esperando, pero debido a que se han realizado estudios limitados aun puede haber un riesgo sustancial o un daño serio. La alta cantidad de azúcar en la sangre constituye un gran riesgo para la salud de su bebé. Su médico cree que usando glyburide reduciría ese riesgo.

– –

Mis preguntas acerca del uso de glyburide ha sido respondida satisfactoriamente, Yo, _____, entiendo y acepto el posible riesgo sustancial y el serio daño y estoy de acuerdo de usar glyburide durante el embarazo..

Firma de la Paciente _____ Fecha: _____

Firma del Testigo_____Fecha:_____

APPROVED DIABETES EDUCATION PROGRAMS

Diabetes self-management training (DSMT) is generally conducted in a hospital or clinic with group and individual instruction. DSMT consists of education from a 'team' of individuals from various disciplines. The 'team' may include nurses, dietitians, doctors, pharmacists, exercise physiologists, health educators, counselors and other knowledgeable health care professionals**.** An *individualized* program is based on an initial assessment, and may cover any or all of the topics below depending on the needs of the patient:

- The diabetes disease process and treatment options
- Incorporating physical activity into a lifestyle
- Monitoring blood glucose, urine ketones (when appropriate), and using results to improve control
- Preventing, detecting and treating acute complications
- Goal setting to promote health, and solve problems of daily living
- Medical nutrition therapy and incorporating appropriate nutritional management
- Utilizing medications for therapeutic effectiveness
- Integrating psychosocial adjustment to daily life
- Promoting preconception care, management of pregnancy, and gestational diabetes
- Preventing (through risk reduction behavior), detecting, and treating chronic complications

For reimbursement, most health insurance plans require DSMT programs to meet the criteria set by the Utah Diabetes Prevention and Control Program (DPCP) or American Diabetes Association (ADA). Check with health plans to assure eligibility for reimbursement; some providers have approval pending. Note: MEDICARE REIMBURSES ONLY FOR DSMT PROVIDED IN ADA APPROVED PROGRAMS.

Northern Utah - Box Elder, Cache, Davis, and Weber Counties

Brigham City Hospital		
Brigham City, Utah 84302	435-734-4339	DPCP
Bear River Valley Hospital		
Tremonton, Utah 84337	435-257-7441	ADA
Budge Clinic		
Logan, Utah 84341	435-792-1707	ADA
Logan Regional Hospital		
Logan, Utah 84341	435-716-5439	ADA
Bountiful Health Center (IHC)		
Bountiful, Utah 84010	801-294-1000	ADA
Davis Hospital/ Medical Center		
Layton, Utah 84041	800-423-0871	ADA
Lakeview Hospital		
Bountiful, Utah 84010	801-299-2470	ADA
Endocrine and Diabetes Clinic (McKay-Dee)		
Ogden, Utah 84403	801-387-7919	ADA
McKay Dee Outpatient Diabetes Education		
Ogden, Utah 84403	801-387-7539	ADA

Salt Lake County

Alta View Hospital		
Sandy, Utah 84070	801-314-2894	ADA
Bryner Clinic		
Salt Lake City, Utah 84102	801-519-7192	ADA
Cottonwood Hospital		
Murray, Utah 84106	801-314-2894	ADA
Cottonwood Family Practice		
Salt Lake City, Utah 84121	801-262-3443	ADA
Cottonwood Internal Medicine		
Murray, Utah 84107	801-314-4300	ADA
Holladay Health Clinic (IHC)		
Salt Lake City, Utah 84124	801-314-2894	ADA
Jordan Valley Hospital		
West Jordan, Utah 84088	800-423-0871	ADA
LDS Hospital		
Salt Lake City, Utah 84143	801-314-2894	ADA
Medical Tower Family Practice		
Murray, Utah 84107	801-314-4266	ADA
Medical Tower Specialty Clinic		
Murray, Utah 8407	801-314-4890	ADA
Memorial Medical Center		
Salt Lake City, Utah 84105	801-461-7979	ADA
Pioneer Valley Hospital		
West Valley City, Utah 84120	800-423-0871	ADA
Primary Children's at Utah Diabetes Center		
Salt Lake City, Utah 84113	801-581-7761	DPCP
Sandy Health Center (IHC)		
Salt Lake City, Utah 84094	801-501-2100	ADA
St. Marks Hospital		
Salt Lake City, Utah 84124	801-268-7358	ADA
Salt Lake Clinic		
Salt Lake City, Utah 84102	801-535-8117	ADA
Salt Lake Regional Hospital		
Salt Lake City, Utah 84102	800-423-0871	ADA
Taylorsville Health Center (IHC)		
Taylorsville, Utah 84118	801-840-2100	ADA
Utah Diabetes Center, University of Utah		
Salt Lake City, Utah 84108	801-581-7761	ADA
West Jordan Health Center (IHC)		
West Jordan, Utah 84088	801-256-6343	ADA

APPROVED DIABETES EDUCATION PROGRAMS (continued)

Utah and Wasatch Counties

American Fork Hospital			**Utah Valley Regional Medical Center**		
American Fork Utah, 84004	801-763-3471	ADA	Provo, Utah 84605	801-357-7546	ADA
Mountain View Hospital			**Heber Valley Medical Center**		
Payson, Utah 84651	801-465-7045	ADA	Heber City, Utah 84032	435-654-2500	ADA

Central and Southwestern Utah

Central Valley Medical Center			**Garfield Memorial Hospital**		
Nephi, Utah 84648	435-623-3092	DPCP	Panguitch, Utah 84759	435-676-8811	ADA
Gunnison Valley Hospital			**Dixie Regional Medical Center**		
Gunnison, Utah 84634	435-528-3955	DPCP	St. George, Utah 84770	435-688-5085	ADA
Sanpete Valley Hospital			**Valley View Medical Center**		
Mount Pleasant, Utah 84647	435-462-2441	ADA	Cedar City, Utah 84720	435-868-5000	ADA

Uintah Basin and Southeastern Utah

Allen Memorial Hospital			**Blanding Family Practice**			
Moab, Utah 84532	435-259-7191	DPCP	Blanding Utah	84511	435-678-3601	DPCP
Castleview Hospital			**Montezuma Creek Clinic**			
Price, Utah 84501	435-636-4822	DPCP	Montezuma Creek, Utah 84534		435-651-3291	DPCP
Ashley Valley Medical Center			**Monument Valley Health Center**			
Vernal, Utah 84078	435-789-3342 X174	ADA	Monument Valley, Utah 84536		435-727-3242	DPCP
Uintah Basin Medical Center			**Navajo Mountain Clinic** (Via Kayenta AZ 86033)			
Roosevelt, Utah 84066	435-722-4691 X1363	ADA	Navajo Mountain, Utah		928-697-3067	DPCP

Additional Diabetes Self-Management Training Programs

In addition to the DSMT programs locations listed above, some providers of this service have not yet been formally approved. These programs generally fit into one of the following categories:

- Secondary locations of approved programs using the same instructors and curricula
- Providers who have not yet applied for State or ADA approval
- Providers who have not been able to comply with all formal requirements due to staffing shortages
- Programs that have contractual arrangements with third party payers and are able to secure reimbursement without undergoing the formal approval process

Since some health insurance plans will not reimburse for DSMT, patients should verify coverage when planning to receive services through any DSMT provider; however, the programs listed below may be more likely to experience reimbursement difficulties than those listed above because they lack formal approval.

Dixie Regional Medical Center at River Road Clinic			**Sevier Valley Hospital**		
St. George, Utah 84770	435-688-6200		Richfield, Utah 84701	435-893-0371	DPCP
Mountain West Medical Center - Diabetes Education					
Tooele, Utah 84074	801- 882-4163				

In addition to the education programs listed here, all Utah Community Health Centers not listed above participate in a National Diabetes Collaborative and have training in diabetes treatment and education. If they have not been formally approved, the experience and training for diabetes educational services in those not listed is subject to fluctuations depending on staff availability and experience. Please call to ascertain the availability of self-management training in advance of referral.

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